

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

AN INVESTIGATION INTO THE ECONOMIC)	
FEASIBILITY OF PROVIDING LOCAL)	ADMINISTRATIVE
MEASURED SERVICE TELEPHONE RATES)	CASE NO. 285
IN KENTUCKY)	

O R D E R

INTRODUCTION

Procedural Background

On November 16, 1984, the Kentucky Public Service Commission ("Commission") established this case to determine the feasibility of adopting usage sensitive rates for telephone service in Kentucky. The Commission, in establishing this case, stated a number of concerns that it felt had to be addressed prior to adopting usage sensitive rates for Kentucky. In addition to stating its concerns, the Commission established an operational framework which both provided the telephone companies the opportunity to develop data in an actual experimental situation and also provided intervenors and other interested parties the opportunity to participate in the actual research project.

In the Order establishing this case, a concern was expressed with whether the adoption of local measured service would lead to a more efficient pricing system for local telephone service. Proponents of local measured service contend that the level of investment in certain capital components (i.e., central office

switches and interoffice trunking) of the telephone network is affected by the amount of telephone usage during peak usage periods of the day and year. They argue that by pricing telephone service on a usage sensitive basis consumers will reduce their telephone usage during these peak periods by either not making non-essential calls or by completing calls during an off-peak period. Thus, in the long run, consumers will enjoy lower cost telephone services through more efficient utilization of the local network.

In contrast, opponents of local measured service contend that adoption of usage sensitive rates will result in additional costs for telephone usage, reduce usage during non-peak periods, and generally cause a less efficient utilization of the telephone network. Opponents argue that the adoption of usage sensitive rates results in increased costs for providing telephone service because of the additional costs associated with measuring and billing of telephone usage. In addition, the opponents contend that during the peak calling period, consumers would not be responsive to usage sensitive prices negating a reduction in capital investment in the long run. Finally, the opponents argue that during the off-peak period consumers will reduce their usage because of the positive price, resulting in less efficient utilization of the network at a higher cost.

As a result of the positions taken on local measured service by the various parties, it was decided to open an investigation to determine through a Kentucky-specific empirical study the social costs and benefits of usage sensitive rates and ultimately to

determine if local measured service should have a role in the pricing of telecommunications services in Kentucky. As a part of the investigation, the Commission required South Central Bell Telephone Company ("South Central Bell") and GTE South Incorporated ("GTE") to prepare and file Kentucky-specific cost/benefit studies on local measured service. As a part of the preparation for the study, South Central Bell and GTE were authorized to gather Kentucky-specific usage and cost data through local measured service rate trials approved in Bowling Green, Louisville, Campbellsville, Morehead, and Glasgow. Using the data gathered in these trials, other Kentucky-specific information, and analytical techniques available to the companies, studies were prepared to estimate the social gains or losses that may accrue from adopting local measured service rates.

In Case No. 9571,¹ the Commission approved a 6-month rate experiment in both the Bowling Green and the Louisville Third Street exchanges. South Central Bell implemented mandatory measured service in Bowling Green and optional measured service in Louisville. Extensive data was collected from participating consumers in both exchanges on usage and demographic characteristics. During this timeframe, a one-year mandatory measured service was approved in Case No. 9660² for GTE in the Campbellsville, Morehead, and Glasgow exchanges. Similar usage and demographic

¹ Case No. 9571, South Central Bell's Proposed Experimental Local Measured Service Tariffs.

² Case No. 9660, Petition of General Telephone Company of the South to Change Certain Rates and Charges for Intrastate Telephone Service.

data were collected in these exchanges. GTE and South Central Bell completed their experimental offerings on schedule, gathered the data necessary to analyze local measured service, and responded to the Commission's concerns.

On January 8, 1988, an Order was entered establishing a procedural schedule for completion of this case. South Central Bell and GTE were ordered to prefile testimony addressing the issues as set forth in the Order of May 1984. The records from Case No. 9660 and Case No. 9571 were incorporated into this case.

Motions to intervene were filed by MCI Telecommunications Corporation ("MCI"), the Attorney General's Utility and Rate Intervention Division ("AG"), Cincinnati Bell Telephone Company ("Cincinnati Bell"), Steve Hixson, and Kentucky Legal Services ("Legal Services"). All intervening parties had participated in the local measured service oversight committee and the motions were granted without exception.

A public hearing was conducted at the Commission's offices in Frankfort, Kentucky, on July 31, 1988 for purposes of taking public comments and cross-examining the witnesses. Briefs were filed on November 21, 1988. All information requested during the hearing has been filed.

Witnesses appearing for the telephone utilities and intervenors were as follows:

South Central Bell

Jerry Hausman
Professor of Economics
Massachusetts Institute of Technology

Lorraine Maddox
Assistant Staff Manager
Pricing and Economics Department
BellSouth Services

Joan D. Mezzell
Operations Manager
Rates and Economic Department
South Central Bell

Lewis Perle
Senior Vice President
National Economic Research Assoc.

GTE

Robert L. Mitchell
Product Manager
GTE Data Services, Inc.

Larry Elrod
Supervisor
Forecasting Section of the
Marketing Department

Edward C. Beauvais
Director of Pricing and Policy
Analysis
GTE Service Corporation

Cincinnati Bell

R. William Stropes
District Manager
Docket Management

AG

Marvin Kahn
Senior Economist
Exeter Associates, Inc.

COST/BENEFIT STUDIES

GTE Cost/Benefit Study

GTE prepared and filed a cost/benefit study based upon a comparison of the results of its local measured service trials and its normal flat rate operations. GTE restricted its study to the comparison of its proposed local measured service rate structure and current flat rate. GTE did not attempt to adjust the rates of other services to better reflect the incremental or marginal cost of providing these services. GTE prepared a base case using current flat rates and contrasted it with a second case using

incremental costs. This enabled GTE to provide estimates of the costs and benefits strictly attributable to shifting local service rates from its current flat rate basis to usage sensitive rates based on long-run incremental costs.

In its study, GTE modeled the impact of moving customers from a flat rate structure to a mandatory local measured service rate structure. The first component of its cost/benefit study consisted of a demand study. In its demand analysis, GTE used aggregated usage data developed in the exchanges involved in the local measured service trials. Using standard statistical techniques, GTE estimated the required price elasticity of demand. Price elasticity estimates were calculated for residential, single line business, and multiline customers for their call set-ups and minutes of use during both peak and off-peak periods.

GTE compared these estimates with values developed by other economic researchers and found that the results were consistent with the exception of the business individual line customers. GTE observed that the elasticities were low compared to existing estimates in the literature, but that they were reasonable. GTE did not prepare an estimate of price elasticity of demand for telephone access. Instead, it relied on nationwide estimates developed by National Economic Research Associates, Inc.³

The second component in GTE's cost/benefit analysis was to estimate the incremental cost associated with telephone usage. Using a GTE developed COSTMOD engineering model and assuming that

³ Dr. Beauvais, Prefiled Testimony, pages 20-22.

all central offices were equipped with state of the art digital switches, GTE estimated the incremental costs of telephone usage. The resulting incremental costs were used to estimate the cost savings associated with reduced telephone usage.

The third step in developing an estimate of the costs and benefits of usage sensitive service was to determine the additional costs associated with measuring, storing call records, processing call records, and billing for telephone usage. GTE observed that currently it is billing toll calls on a usage sensitive basis and the initial startup and capital cost in exchanges with stored program central offices will be the cost of adding capacity to the billing intermediate processor and the associated telecommunications equipment necessary for local call measurements. GTE estimated the incremental capital and startup costs per line to be \$2.38 in Kentucky if all 58 central offices⁴ are assumed to be stored program control digital base or remote units. In addition to the non-recurring costs associated with providing usage sensitive services, GTE indicates that there are also recurring costs. These costs include cost of processing local traffic, business office functions, and local operator services.

Using the estimates developed in each of the above areas, GTE calculated the potential benefits that could result from moving from flat rates to usage sensitive rates. GTE assumed that usage prices were set approximately equal to the long-run marginal cost

⁴ GTE Cost/Benefit Study, page 31.

plus the metering cost per message. By applying a positive price for usage, GTE estimates the potential benefits of local measured service at \$1.73 per line per year. Further, GTE adjusted its \$1.73 gain for the initial capital cost needed to implement usage sensitive pricing resulting in a net efficiency gain of \$1.16 per access line per year.⁵ Using the results of its cost/benefit study, GTE contends that local measured service leads to a more economically efficient rate structure.

South Central Bell Cost/Benefit Study

South Central Bell prepared and filed a cost/benefit study utilizing the data gathered during the local measured service rate experiment in Louisville and Bowling Green. South Central Bell used a two-level budget model to develop the input values required to drive its cost/benefit model. The methodology provides estimates of peak/off-peak minutes share, total monthly minutes, and class of service choice for both business and residential consumers. This methodology also provides price elasticity estimates for each of the time periods and estimates of the minutes of use shift parameters that result from the price differentials in each time period. These estimates are used as a direct input in the NERA⁶ cost/benefit model. The methodology used to evaluate the economic efficiency of local measured service pricing was based on a model developed by NERA.

⁵ Id., page 54.

⁶ National Economic Research Associates.

South Central Bell updated its incremental cost study to reflect the latest costs of equipment.⁷ Using its Levelized Incremental Usage Costs model, South Central Bell estimated the additional costs for the first minute of a call and each additional minute in calls of extended duration. In addition to these costs the additional costs of measuring and billing of local measured service were calculated by the model. Both the usage costs and the billing and measurement costs were used as inputs to the cost/benefit model of South Central Bell.

South Central Bell's cost/benefit analysis differs from GTE's in that South Central Bell attempts to estimate all benefits that a customer receives from telephone service. The model includes demand equations for telephone subscription, class of service choice, local usage, and toll usage. These models provide estimates of the number of households that would subscribe to local measured service, flat rate, local usage, and toll usage. Using this model, South Central Bell estimated the cost/benefits of five different rate plans.

South Central Bell contends that its model demonstrates that adoption of optional local measured service is economically more efficient than the current mandatory flat rate tariff structure. For example, South Central Bell argues that the adoption of local measured service for residential and business consumers improves overall societal benefits by about \$1,330,000 annually.⁸ South

⁷ South Central Bell Cost/Benefit Study, page 12.

⁸ Dr. Perle, Direct Testimony, page 17.

Central Bell also contends that adjusting toll prices toward cost and adopting an extended area service plan results in benefits of about \$11,420,000 per year when compared to current flat rate pricing,⁹ and that approximately 66 percent of these benefits will accrue to residential consumers.

The AG's Position

The AG did not prepare a cost/benefit study in this proceeding nor did its witness attempt to assess the accuracy of the studies prepared by South Central Bell or GTE. However, the AG did contend that the methodology used by South Central Bell prevented the Commission from determining the actual benefits derived from local measured service. The AG further argued that the limited benefits determined by both GTE and South Central Bell were inadequate for supporting local measured service on an economic efficiency basis. Instead, the AG asserted that if the Commission chooses to adopt local measured service, it must be on strictly a public policy basis.

ANALYSIS AND DISCUSSION

Universal Service

A major objective of the Commission's telecommunications policy remains the expansion of telephone subscribership in Kentucky. In Case No. 8847,¹⁰ South Central Bell argued that the adoption of optional local measured service supports this objective. South Central Bell contends that the "unbundling" of

⁹ Id., page 18.

¹⁰ Case No. 8847, Notice of South Central Bell Telephone Company of an Adjustment in Its Intrastate Rates and Charges.

telephone usage and access will provide consumers greater choice on the level of service they wish to select, i.e. by having the opportunity to select low priced access as an alternative to higher flat rate service it will be easier to maintain customers on the network. South Central Bell also argues that the use of local measured service will provide new marketing opportunities for network services which will generate additional revenue that can be used to maintain lower access rates.

In the cost/benefit studies filed by South Central Bell, it estimated the different subscriber levels associated with each pricing scenario. South Central Bell estimated that approximately 85.8 percent of the households would subscribe to telephone service under a strictly flat rate tariff. In contrast using a scenario that contained optional local measured service, approximately 87.42 percent of the available households will subscribe to telephone service. Thus, South Central Bell contends that "[o]ver 12,000 Kentucky households would become telephone subscribers, relative to the number of subscribers that would be expected if current mandatory flat rates were extended indefinitely."¹¹ Therefore, South Central Bell concludes that local measured service is consistent with and contributes to the Commission's goal of universal service.

GTE's position on local measured service and universal service is similar to South Central Bell's. GTE argues "[u]nbundled pricing for network access, or an 'economy' offering,

¹¹ Dr. Perle, Direct Testimony, page 17.

also has the potential to greatly mitigate potential network drop-off in the face of local rate increases."¹² GTE contends that the adoption of local measured service could result in an estimated 45 percent rate reduction for residential network access and approximately a 21 percent rate reduction for business network access.¹³ Therefore, GTE asserts, "Universal Service goals would be advanced by the substantially reduced price for network access available under a measured price structure."¹⁴

The AG expressed concern with the estimates provided by South Central Bell on the increase in telephone subscribership resulting from local measured service. The AG contends that the estimates of subscribership were based on information developed on a national level¹⁵ and that the estimates failed to consider "[t]he possibility that there are physical barriers, rather than simply economic barriers, that are involved in some people not taking telephone service."¹⁶ In addition, the AG argues that if the Commission should adopt a lifeline service, then "[t]he increase in penetration would be made smaller from local measured service."¹⁷ Finally, the AG recommended that local measured

¹² Robert Mitchell, Direct Testimony, page 18.

¹³ GTE Cost/Benefit Study, page 60, Table 13.

¹⁴ Robert Mitchell, Direct Testimony, page 18.

¹⁵ Transcript of Evidence ("T.E."), Volume III, page 103.

¹⁶ Id.

¹⁷ Id., page 105.

service not be viewed as a lifeline offering but instead treated as a separate issue.

The Commission does not view local measured service as a lifeline alternative. Lifeline rates are generally targeted to specific demographic or socio-economic groups, available under specific eligibility criteria, and incorporate a specific subsidy arrangement. Local measured service meets none of these lifeline tests. Although local measured service may contribute to increased subscribership through more or less sharply discounted access prices, it is not clear that such discounted access prices are in the public interest due to their implications for revenue requirements, redistribution among subscribers. Also, other programs have proven to be effective in increasing subscribership. These include, for example, federal and state link-up and lifeline assistance programs, installation charges payment policies, and deposit policies.

Equity

The Commission has in a number of Orders expressed considerable concern with whether the implementation of local measured service would result in a more equitable rate structure for telecommunications. South Central Bell and GTE were required to collect the data necessary through surveys to determine the rate impact of local measured service on various demographic and economic sub-groups within their residential customer class. This information was used to determine if any specific customer sub-group carried a disproportionate cost burden through the introduction of local measured service.

South Central Bell adopted the position that equity implies that the amount a customer pays for telephone service should closely match what it costs to serve that customer.¹⁸ Using this criteria, South Central Bell contends that local measured service is more equitable than flat rate service. To illustrate its position, South Central Bell points out that low use customers may pay as much as 110 percent of the costs, while large use customers may pay less than 50 percent of the costs with flat rate service.¹⁹ South Central Bell goes on to argue that with local measured service approximately 60 percent of its customers would benefit with lower rates. Further, as a result of its research, South Central Bell was able to determine that it is households with greater than five members that are most adversely affected by the implementation of local measured service. South Central Bell contends that other economic and demographic sub-groups identified in the research were affected in either a positive or neutral manner.

GTE conducted similar demographic and economic research in its three exchanges. GTE, like South Central Bell, identified families with greater than six members as being the customer sub-group most adversely affected by local measured service.²⁰ The Kentucky local measured service experiment showed that 65 to 75 percent of customers experienced savings when compared to flat

¹⁸ Dr. Perle, Direct Testimony, page 5.

¹⁹ Id., page 6.

²⁰ GTE Cost/Benefit Study, Exhibits 13 and 14.

rate usage costs. Therefore, GTE asserts that "[t]he equity arguments also support the adoption of local measured service in Kentucky as opposed to continued reliance on flat rate."²¹

The AG and Legal Services questioned potential savings by ratepayers moving from flat to local measured service rates. They pointed out that if the Commission had authorized revenue neutral rates, then fewer ratepayers would have received reductions in their monthly bills than was realized under the adopted rates in the trial exchanges.

Equity considerations related to the implementation of local measured service command serious review. First, the evidence is not thoroughly convincing that local measured service results in a more equitable rate structure vis-a-vis the cost structure of the telecommunications industry. Second, unreasonable and precipitous redistribution of revenue requirement among subscribers should be avoided, particularly considering that the results of the cost/benefit studies are marginal and that the billing results across demographic sub-groups are skewed due to the rate structures tested.

Analysis of Local Measured Service

In establishing this case, we have stated that our intention was to evaluate the costs and benefits of adopting local measured service as an alternative to flat rate pricing in telecommunications. The areas that we particularly wanted to emphasize in the evaluation of the effects of local measured

²¹ Id., page 61.

service were universal service, equity, and economic efficiency. South Central Bell and GTE have completed the required analysis and have provided both the report and testimony supporting their findings on the benefits and costs of local measured service in this proceeding. As a result of this analysis, they have recommended that the Commission adopt a policy that will reserve a role for local measured service in the structure of telecommunications pricing. Both have argued that the adoption of local measured service with certain constraints will contribute positively to the Commission's goals of equity, efficiency, and universal service.

~~The AG does not concur with South Central Bell's and GTE's~~ interpretations of the results of the local measured service experiment. The AG contends that the benefits resulting from the implementation of local measured service were simply not significant enough to justify adopting a local measured service plan for the state. The AG contended that the \$1.73 and \$1.16 annual benefits per line identified by South Central Bell and GTE, respectively, were inadequate to justify adopting either mandatory or optional local measured service on efficiency grounds.²² Indeed, the AG argued that the efficiency results could actually be negative if the calls switching from peak to off-peak are less than was estimated by the companies. Further, the AG argued that alternative flat rate policies such as lifeline could provide

²² Dr. Kahn, Prefiled Testimony, page 7.

essentially the same universal service benefits as local measured service in the context of telecommunications pricing.²³ The AG did indicate that it may be appropriate to offer an optional local measured service based strictly on public policy reasons.

In deciding whether to authorize local measured service, the Commission is faced with only marginal empirical support on strictly efficiency grounds. The Commission concurs with the AG that the dollar benefits identified in the research are so small that there is some probability that either optional or mandatory local measured service could result in an overall reduction in society's value of telecommunications. In addition to the statistical concerns, the Commission cannot ignore the market dynamics associated with the cost of switching and trunking technology. The continued decline in the costs of switching memory and fiber optic technology could also lessen the benefits derived from local measured service as the incremental cost associated with usage declines. Therefore, the Commission finds that the role of local measured service in the pricing of telecommunications is only minimally supported through gains in economic efficiency.

Both South Central Bell and GTE contend that the adoption of a local measured service plan will support the Commission's goal of universal service. In each of the scenarios filed by South Central Bell, it identified the number of additional subscribers that would result from adopting specific rate policies. In each local measured service scenario, the number of subscribers

²³ T. E., Volume III, pages 104-105.

increased over both the base case and the flat rate scenario. However, South Central Bell's methodology does not differentiate sufficiently so that the Commission can strictly attribute the subscribership gains to local measured service. The Commission also recognizes that there are alternative pricing policies which, if used in conjunction with the current flat rate system, may increase subscribership. Nonetheless, the Commission believes that it is preferable from a public policy perspective to allow customers to select their level of service from as wide a range of services as can reasonably be made available. Therefore, the Commission finds that the authorization of local measured service may provide positive benefits for universal service.

The final area to be addressed in the cost/benefit studies was equity. The Commission was concerned that migration from flat rate to local measured service would result in a disproportionate economic burden on some socio-economic sub-groups of customers. Both South Central Bell and GTE contend that the adoption of local measured service will not result in an inequitable allocation of costs on any single group. For example, as discussed above, most customers received reduced bills in the local measured service trials and, arguably, local measured service may more closely align rates with costs, supra. However, both South Central Bell and GTE provided a caveat that if the experimental tariffs had been revenue neutral, the savings would have been less. Nonetheless, despite this limitation, the Commission finds that local measured service may contribute to increased equity among customer sub-groups.

The Commission has carefully weighed the evidence provided in this proceeding and has decided to authorize local measured service with strict guidelines. The Commission believes that the evolution of the telecommunications industry necessitates that it and the telephone companies maintain pricing flexibility in order to react to changing technologies and competition. Absent the need to react to changing technologies and competition, we would have denied the use of local measured service because of the meager benefits and general unpopularity of the service with the public.

Mandatory versus Optional Local Measured Service

South Central Bell has offered optional local measured service in its exchanges that have stored program control switches since 1981. In 1984, the Commission, in Case No. 8847, expressed concern that expansion of this service may result in lost revenue and cross-subsidies among different groups of ratepayers without the benefits of reduced cost of service. In South Central Bell's research proposal it indicated that it would prepare an evaluation of mandatory versus optional measured service during its local measured service study. In order to prepare such a study, South Central Bell provided optional local measured service in its Third Street exchange in Louisville and mandatory local measured service in Bowling Green. In the development of its cost/benefit study, South Central Bell did not prepare a mandatory local measured service scenario for comparison purposes with the optional local measured service scenario; however, South Central Bell did

estimate the benefits of customer preference for an optional choice to be approximately \$6 million.²⁴

As support for its position on voluntary measured service, South Central Bell contends "[t]hat although there may be less gain in economic efficiency from reducing calls, the customers who take measured service have a preference for it that outweighs the reduced gains from fewer calls."²⁵ Further, South Central Bell argues that the development of local measured service may be an essential feature in how the telephone companies position themselves to provide transmission for information services. Finally, South Central Bell argues that measured service could be an important revenue source for maintaining contribution levels in the future telecommunications environment.

GTE did not prepare a study to compare the benefits and costs of mandatory versus optional measured service. GTE took the position that optional measured service provided an appropriate path for transitioning to a measured rate environment. However, GTE indicated that it supported mandatory local measured service as the appropriate method for pricing switched services in the future.

The AG opposes the adoption of mandatory measured service under any circumstances. The AG contends, "The [SCB] and GTE South studies provide no basis for a mandatory requirement." Further the AG argues that "[i]f local measured service is to be

²⁴ Dr. Hausman, Prefiled Testimony, page 16.

²⁵ Id., page 15.

provided, local measured service and flat rate service should be priced as alternatives and not with the intent of migrating subscribers to one or the other service."²⁶ Both the AG and Cincinnati Bell contended that authorization of a properly designed local measured service would have minor effects on revenue.

The Commission finds little support at this time for mandatory local measured service on efficiency, equity, or universal service grounds. We cannot ignore public opinion in our determination concerning the role of mandatory and/or optional local measured service in telephone pricing. Both GTE and South Central Bell found that only 24 to 26 percent of their residential consumers were in favor of local measured service, even though many benefited from reduced bills during the local measured service trials.²⁷ Only GTE provided any support for mandatory local measured service and it indicated that for the present optional local measured service may be preferable. The AG, Cincinnati Bell, and South Central Bell all supported optional local measured service if the Commission authorizes local measured service.

The Commission finds that mandatory local measured service should be rejected as a rate structure for pricing local telephone service. Optional local measured service is consistent with our

²⁶ Dr. Kahn, Prefiled Testimony, page 5.

²⁷ Robert Mitchell, Direct Testimony, page 13; Perception of Local Measured Telephone Service: Household and Business Surveys in Bowling Green, Kentucky (1987), Table 1.

regulatory goals in telecommunications pricing and should be permitted. The Commission continues to be concerned with the potential use of optional local measured service for migrating customers to a mandatory local measured service structure. The Commission certainly does not intend for local measured service to become a vehicle for extracting monopoly profits from the local exchange and will carefully monitor any optional local measured service rate structure with this concern in mind.

Local Measured Service Policy Implementation Procedures

Considerable concern was expressed by all parties regarding the direction that optional local measured service implementation should take if the Commission determined it to be in the public interest. All parties agreed that under all circumstances, the implementation of any local measured service policy should be gradual with considerable customer education prior to implementation. South Central Bell, GTE, and the AG proposed alternative methods for implementing optional local measured service rate structures.

South Central Bell proposed two alternative plans as a transition mechanism to its preferred optional local measured service rate structure. The first plan proposed by South Central Bell consisted of a two-step procedure. The first step would be converting existing optional local measured service customers to the proposed local measured service rate structure and lifting the current local measured service moratorium. The second step would consist of "grandfathering" the current flat rate service and implementing a residence premium service. South Central Bell did

not provide details of the proposed residence premium service under this alternative since the second plan was its preferred transition mechanism.

The second plan proposed by South Central Bell consisted of introducing a new rate schedule on an exchange-by-exchange basis. South Central Bell filed a representative tariff to demonstrate the rate structure under the proposed plan. South Central Bell proposed that residential customers be given three options. The first option consisted of an access line monthly rate of \$8.20 and usage caps that ranged from \$10 in rate group 1 to \$15.50 in rate group 5. The second option consisted of an access line monthly rate of \$8.20, a \$7.50 usage allowance at a price of \$6 a month, and a 20 percent discount on all charges in excess of the allowance. Again, the usage caps would apply. Under options 1 and 2, usage caps and usage allowances apply within 16 miles. Finally, South Central Bell proposed to implement a residential premium flat rate service where residential customers could select unlimited flat rate local calling within 16 miles. Under each option local calling bands extend out to 40 miles.

South Central Bell proposed a similar implementation plan for business customers, with the exception that the flat rate premium option would not be available. The access line rate would be \$29.15 with the cap ranging from \$18.50 for rate group 1 to \$28.50 for rate group 5. Optional local measured service plans 1 and 2 for business customers would be offered using the same usage rate structure as those offered for residential customers.

During the interim period in exchanges where South Central Bell does not have stored program control switches, it has proposed to adopt an extended area service optional calling plan. The optional calling plan would be available to both residential and business customers. The rates would be on a hourly basis with the rate increasing by mileage band out to 22 miles. Customers would maintain current flat rates for local exchange calls until a stored program control switch is installed.

GTE proposed that the Commission authorize it to implement a cost-based mandatory local measured service tariff in all exchanges that have stored program controlled switches. The rate structure proposed by GTE would contain all of the elements that were used in its local measured service trials. When the rate structure is in place, GTE recommends that the Commission expand local calling scopes to "eliminate the substantial repressive effect of prevailing toll rates."²⁸ GTE did not elaborate on a transition mechanism for the conversion from flat rate to local measured service. GTE did indicate that if the Commission rejects mandatory local measured service, then it should permit optional local measured service in all exchanges with stored program controlled switches. GTE indicated that South Central Bell's proposed optional local measured service structure and proposed transition plan would be appropriate.

The AG did not concur with GTE's or South Central Bell's proposed implementation plans. The AG indicated that if for public

²⁸ Robert Mitchell, Direct Testimony, page 21.

policy reasons the Commission should decide to proceed with local measured service, then it should adopt an optional local measured service plan similar to that used in Pennsylvania and West Virginia. The AG indicated that the proposed optional local measured service should be structured so that it provides an alternative to the current flat rate. The AG contends that such a rate structure would minimize customer migration while providing customers that wanted local measured service the opportunity to take advantage of it. The AG did not feel that revenue erosion would result after equilibrium occurred.

GTE's transition plan and South Central Bell's first transition plan fail to provide an effective method for introducing optional local measured service. South Central Bell's proposed transition plan has included a number of potential rate packages for customer selection. In each case, South Central Bell proposed to cap the local measured service options at the flat rate. This is not an optional service. Contrary to South Central Bell's contentions of benefits, the Commission views the proposed rate cap as encouraging consumer confusion. The only reason that a consumer would elect the flat rate service option would be that the customer does not understand that the maximum amount which would be paid under a local measured service option would be equal to the premium flat rate. If a telephone utility proposes to offer alternative rate packages, then the local measured service packages should not be capped at the same rate levels as the flat rate option.

Indeed, rate caps should not be applied to local measured service, but, if proposed, should be justified on cost or equity grounds and should significantly exceed the flat rate. Because the introduction of a large number of optional local measured service rate structures may well create customer confusion, we will initially restrict the number of options provided to the residential customer to one optional local measured service plan. As the Commission, customers, and telephone companies gain experience, the Commission may choose to adjust both the number and structure of options accordingly.

South Central Bell did not propose to offer a flat rate option to business customers in exchanges where optional local measured service is offered. Because of the differing service requirements of business customers, the Commission believes that they should be offered rate options similar to those offered to residential consumers. However, the Commission will continue to permit telephone companies to price its business services access rates at levels that generate revenues greater than residential access rates.

The failure to define revenue requirements for local measured service may result in rates that both reduce efficiency and are inequitable. Therefore, the Commission will permit, but not require, the local exchange carriers to provide optional local measured service at the carriers' discretion subject to the criteria that the rates for flat rate service will not change as a result of a carrier exercising its option to provide local measured service.

To effectuate this result, a local service revenue requirement should be calculated as it otherwise would be in the absence of measured service, i.e., as a residual requirement resulting from calculating the revenues generated by other services and subtracting this result from the overall revenue requirement. The additional costs of local measured service should be subtracted from this residual local service revenue requirement, from which flat rates would be determined as if all subscribers were provided flat rate service, and observing the existing policy with respect to rate groupings and the rate relationships between business and residential services. A price-out of the revenues that would actually be generated by flat-rate subscribers should be determined, which should then be subtracted from the local service revenue requirement, in effect creating a secondary residual revenue requirement to be allocated to measured services.

To this secondary residual should be added the additional costs of local measured service that were previously removed. For optional measured service, usage rates should be determined by pricing usage at incremental costs, to include measuring, recording and billing costs, plus an appropriate contribution for that period or periods defined as on-peak. The access line revenue requirement should be determined as the difference in the measured service revenue requirement and the revenue recovered from the usage-based rates.

In authorizing optional local measured service we do not intend to abandon current rate groups. Rate groups should

continue to be recognized by South Central Bell, GTE, and other telephone companies in the design of their optional local measured service rate structures.

If a telephone utility is attempting to price to achieve economic efficiency, then off-peak rates should better reflect the marginal cost of providing telephone usage. Both GTE and South Central Bell proposed rates for the off-peak that were 50 percent of the peak rate. A major objection to local measured service is that a person cannot use the telephone without being consciously concerned with the costs. Many of the witnesses contended that their calls deal with social concerns and charities which add not only to the opportunity costs of their time but also result in direct out-of-pocket costs.

The cost studies indicate that the off-peak costs of telephone usage are minuscule. Most of the costs allocated to the off-peak period were either billing related or maintenance. At least some of the objections to local measured service can be addressed through a free off-peak usage period. A free off-peak usage period is consistent with an efficient pricing system. There would be no billing costs without the peaking problem and only minimal maintenance costs. Therefore, the Commission will require all telephone companies that wish to file local measured service tariffs to include a zero rating element in the off-peak period. The on-peak prices should be based on incremental costs, supra.

We have no objection to South Central Bell's proposal to implement an optional local measured service package in a single

exchange, such as Paducah. By implementing in a single exchange, South Central Bell hopes to gain the experience necessary in educating its customers to minimize problems with implementation in other parts of Kentucky. South Central Bell does not propose to treat this as an experiment with a time-limited tariff but instead to offer it as a permanent tariff and to adjust it only if experience requires. South Central Bell, GTE, and other interested telephone utilities should provide the Commission a list of candidate exchanges within two months of the issuance of this Order. The Commission will also require all telephone utilities that file such a list to develop a complete plan addressing the method of introduction, information that will be provided to customers, and information which should be gathered for the evaluation of the effects from the proposed change in rate structures. This information should be provided at the time telephone companies request optional local measured service.

The Commission recognizes that the Independent Telephone Group does not have the resources available to prepare incremental cost studies. Since all usage sensitive rates are to be based on incremental costs, this requirement would probably preclude them from offering local measured service. Although these companies have not proposed local measured service rates, if any member does wish to file such a rate structure, the Commission will not require of them an incremental cost study but will allow members of the Independent Telephone Group to file usage rates that mirror South Central Bell, Contel, Cincinnati Bell, or GTE. Access rates

should be determined based on residual pricing as discussed in other sections of this Order. All other requirements shall apply.

Other Issues

MCI expressed concern with South Central Bell's proposal for addressing extended area service as a part of its local measured service implementation. MCI contends that extending local calling distance bands may capture a significant portion of the intraLATA toll market. With proceedings under way to expand competition in the intraLATA market, MCI has requested that South Central Bell's proposal to expand local calling distance bands be denied in this docket and addressed in a proceeding dealing strictly with extended area service.

The Commission realizes that the definition of a local exchange area may have some impact on intraLATA competition; however, it does not feel that intraLATA competition should restrict it in its effort to bring consistency and equity to local exchange pricing. Neither does the Commission intend to define local exchange boundaries or expand local calling areas in this proceeding. The Commission believes that optional local measured service may play a role in its ultimate policies on extended area service and does not intend to restrict its future use in this proceeding. The Commission will give MCI ample opportunity to participate in any further local measured service and extended area service proceedings contemplated in this Order.

Having been otherwise sufficiently advised, the Commission
HEREBY ORDERS that:

1. Optional local measured service shall be authorized consistent with the terms and conditions of this Order.

2. South Central Bell's proposed optional local measured and optional extended area service implementation plans are denied.

3. All telephone companies under the jurisdiction of the Commission which intend to implement optional local measured service shall be restricted to providing one optional local measured service tariff.

4. All telephone companies desiring to provide optional measured service shall file a plan which provides an implementation schedule and the information that will be provided to customers in optional local measured service exchanges.

5. All telephone companies shall file a plan at the time that they file their first optional local measured service tariff which details the information that will be collected, analyzed, and provided to the Commission prior to any future statewide authorization.

Done at Frankfort, Kentucky, this 25th day of October, 1990.

PUBLIC SERVICE COMMISSION


Chairman



Commissioner

ATTEST:


Executive Director

Dissenting Opinion of Vice Chairman Robert M. Davis

I do not think there is substantial evidence of record to support approving local measured service at this time. I still have the concern the Commission expressed when establishing this proceeding, and that is whether LMS will lead to a more efficient pricing system for local telephone service. I am not convinced that it will, at this time, and I fear that the future will hold escalating local telephone cost.


Robert M. Davis
Vice Chairman

ATTEST:


Executive Director